ELSEVIER

Journal of Quantitative Spectroscopy & Radiative Transfer 85 (2004) III–IV

Journal of Quantitative Spectroscopy & Radiative Transfer

www.elsevier.com/locate/jqsrt

List of Contents

NUMBER 1

C.H. Kam and **S. Buddhudu** 1 Near infrared to red and yellow to blue upconversion emissions from Pr^{3+}: ZrF_4–BaF_2–LaF_3–YF_3–AlF_3–NaF glasses

S.A. El-Wakil, A.R. Degheidy and **M. Sallah** 13 Time-dependent radiation transfer in a semi-infinite stochastic medium with Rayleigh scattering

A.A. Kokhanovsky 25 Reflection of light from nonasbsorbing semi-infinite cloudy media: a simple approximation

A.A. Kokhanovsky and **V.V. Rozanov** 35 The physical parameterization of the top-of-atmosphere reflection function for a cloudy atmosphere—underlying surface system: the oxygen A-band case study

D.G. Feist 57 The Bernese atmospheric multiple catalog access tool (BEAMCAT): a tool for users of popular spectral line catalogs

Note

A. El-Shahat 99 Variational method for solving radiative transfer problems

R.R. Reddy, Y.N. Ahammed, K.R. Gopal and **D.B. Basha** 105 Spectroscopic investigations on cometary molecules CO^+, CH and CH^+

NUMBER 2

O. İçelli and **S. Erzeneoğlu** 115 Effective atomic numbers of some vanadium and nickel compounds for total photon interactions using transmission experiments

L.H. Liu, K. Kudo and **B.X. Li** 125 Comparison of ray-tracing methods for semitransparent slab with variable spatial refractive index

L.H. Liu 135 Anisotropic emission characteristics of semitransparent spherical particle with spherically asymmetric temperature distribution

W.-d. Dou, C.-j. Dai and **S.-b. Li** 145 Study of Ba 6*snk* Rydberg states in electric field

L. Natarajan 157 Spin-polarized relativistic calculations on highly ionized molybdenum

K. Sung and **P. Varanasi** 165 Hydrogen-broadened half-widths and hydrogen-induced line shifts of $^{12}C^{16}O$ relevant to the Jovian atmospheric spectra

K. Masuda and **H. Ishimoto** 183 Influence of particle orientation on retrieving cirrus cloud properties by use of total and polarized reflectances from satellite measurements

F.Z. Chen and **C.Y.R. Wu** 195 Temperature-dependent photoabsorption cross sections in the VUV-UV region. I. Methane and ethane

Note

A. Pinchuk 211 Optical constants and dielectric function of DNA's nucleotides in UV range

NUMBERS 3–4

B. Ozgener and **H.A. Ozgener** 217 Thermal disadvantage factor calculation by the multiregion collision probability method

M. Kahnert 231 Reproducing the optical properties of fine desert dust aerosols using ensembles of simple model particles

H.H. Walter, J. Landgraf and **O.P. Hasekamp** 251 Linearization of a pseudo-spherical vector radiative transfer model

H.-L. Yi and **H.-P. Tan** 285 Scattering characteristics effect on combined heat transfer through an anisotropic nongray media

M.P. de Abreu 311 A two-component method for solving multislab problems in radiative transfer

X. Liu, M.J. Newchurch, R. Loughman and **P.K. Bhartia** 337 Errors resulting from assuming opaque Lambertian clouds in TOMS ozone retrieval

J.G. Anderson, J.A. Dykema, R.M. Goody, H. Hu and **D.B. Kirk-Davidoff** 367 Absolute, spectrally-resolved, thermal radiance: a benchmark for climate monitoring from space

C. Buet and **B. Despres** 385 Asymptotic analysis of fluid models for the coupling of radiation and hydrodynamics

V. Kisselev and **B. Bulgarelli** 419 Reflection of light from a rough water surface in numerical methods for solving the radiative transfer equation

I List of Contents/Author Index for Volume 85